

Office Action Summary

Application No.

10/502,130

Applicant(s)

ZIEGLER, MICHAEL

Examiner

P. Kathryn Wright

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/14/2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 24-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 24-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Claims

1. This action is in response to papers filed September 14, 2009 in which claims 1 and 31 were amended. Claims 1-4 and 24-35 are under prosecution.

The amendments have been thoroughly reviewed and entered. Any objection/rejection not repeated herein has been withdrawn by the Office.

Applicant's arguments filed September 14, 2009 with respect to the previous rejection the claims under Kaplan et al., (US Patent No. 5,835,620) have been fully considered and are persuasive. Therefore, that rejection has been withdrawn.

However, Applicant's arguments with respect to the previous rejections of the claims under Shimizu et al., (US Patent No. 5,719,679) have been fully considered and are not persuasive. An action on the merits follows.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 31-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It remains unclear where the "antireflection plate" is located in the system. Claim 31 states an antireflection plate is provided and arranged on the side of the container turned away from the image recording device. Claim 1 states the container is in the chamber. However, it is not clear from language of the claim whether the antireflection plate (located on the side of the container opposite the image recording

device) is inside the chamber or outside the chamber. As currently written, the breadth of the claim is such that the antireflection plate can be located outside the chamber and on the side of the container opposite the image recording device in claims 31-33. This would provide an inoperative device since the antireflection plate would not be able to mask out characters on the container during imaging of the body fluid. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. This same logic is applicable to the image recording device.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 24-25, 27, and 34-35 are again rejected under 35 U.S.C. 102(b) as being anticipated by Shimizu et al., (US Patent No. 5,719,679), hereinafter “Shimizu”.

Shimizu teaches an arrangement for analyzing materials comprising an image recording device (camera 33), an image evaluation computer (computer 82), a container (VL), a chamber having no reflections from exterior light sources (see chamber in Fig. 3), and an illuminating device 32.

The image recording device 33 is connected to an image evaluation computer, wherein the material is provided in the container. The image recording device produces at least one image of the material in the container and being aligned with and focused on the container which is in a stationary analysis position on stage 14. See Fig. 2.

Note that the material in the container is not considered as part of the claimed device structure and is therefore not given patentable weight. For apparatus claims, if the prior art structure is capable of performing the intended use, then it meets the claim. Apparatus claims must be structurally distinguishable from the prior art in terms of structure, not function. See MPEP § 2114 & § 2173.05(g).

The illuminating device of Shimizu includes lamps 34, 35 arranged above the container. These lamps serve to illuminate the container and are located on two sides of the container in the stationary analysis position a lateral lamp 34, 35, see Fig. 6. The lateral lamps are arranged such that the mid points of the two lateral lamps and the mid point of the container lie on a straight line (A) as seen from above like Applicant's figure 2. The illuminating device further comprising a middle lamp 32 being provided and arranged in such a way that the mid points of this middle lamp and of the container likewise lie on a vertical straight line (B) which is perpendicular to the straight line (A), as shown in Fig. 6.

As to claim 2, Shimizu teaches the image recording device is a color image camera or a spectral camera, see col. 4, lines 59 et seq.

As to claim 5, Shimizu shows the image recording device 32 is aligned with and focused on the container at an acute angle relative to the vertical axis (i.e., less than 90 degrees), see Fig. 6 for example.

As to claim 24, Shimizu teaches the optical axis of the image recording device 32 runs in a vertical plane that is perpendicular the line (A), the line (B) lying in this vertical plane (see Fig. 6).

With respect to claim 25, the lamps 34, 35 of Shimizu have the same horizontal spacing from the container VL, see Figs. 1 and 3.

As to claim 27, the vertical height of the lateral lamps 20 of Shimizu is of greater dimension than the vertical height of the middle lamp, see Fig. 6.

As to claims 34-35, Shimizu also teaches a lifting rotary gripper 59 for moving a container from its transportation position (30) to its analysis position on stage 14.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu et al., (US Patent No. 5,719,679).

The teachings of Shimizu have summarized previously, *supra*. Shimizu does not specifically recite the spacing of each lamp from the container being sixty millimeters

(claim 26) or the difference in height between the lateral lamps and the middle lamp is sixteen millimeters (claim 28).

However, it would have been an obvious matter of design choice to make the spacing between each lamp from the container sixty millimeters and the difference in height between the lateral lamps and the middle lamp sixteen millimeters, in the system of Shimizu, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

8. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu (US Patent No. 5,719,679) in view Watson et al., (WO 99/28724), hereinafter Watson.

The teachings of Shimizu have been summarized previously, *supra*. Shimizu does not specifically teach a bar code scanner for scanning the vial. However, the use of bar code scanners to identify items being analyzed is considered conventional in the art, see for example Watson.

Watson teaches an arrangement for analyzing body fluids having an image-recording device 22 (color image digital camera) connected to an image evaluation computer(controller, not shown) and a barcode scanner 20. The body fluid is provided in container 14 inside a chamber 10 believed to have few optical reflections provided by the bias in the variation in brightness of the illumination means 142. In the analysis position, the image recording device is aligned with and focused on the container, and an illuminating devices 142 for illuminating the container from above and below.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to have included in the system of Shimizu, a bar code scanner like that taught by Watson, since bar code scanners are well known in the art for providing reliable means for automatically identifying items being analyzed.

9. Claims 31-33, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu (US Patent No. 5,719,679) in view of Toshiaki (JP 09-133687).

The teachings of Shimizu have summarized previously, *supra*. Shimizu teaches analyzing the contents of a container using an image recording device (i.e., imaging camera) and three lamps positioned around the container for capturing an image of the contents of the container. However, Shimizu does not specifically recite an anti-reflection plate arranged on the side of the container and turned away from the image recording device.

Toshiaki does teach an anti-reflection plate (plastic body or piece of paper) made of a white or gray material placed behind the tube when the image is recorded, in order for the background to be as uniform as possible and arranged on the side of the container, turned away from the image recording device, see paragraph [0042] of Detailed Description section of Toshiaki (see English translation provided with Official action dated July 06, 2007). The flexible paper is believed capable of creating a concave depression adapted to conform to the peripheral shape of the container.

Thus, it would have been obvious to one having ordinary skill in the art at the time of the claimed invention to have included in the detector system of Shimizu, the

anti-reflection plate of Toshiaki so as to make the exterior of the tube as uniform as possible to remove the background noise resulting from a tube with or without label, see paragraph [0042] of Detailed Description section of Toshiaki (see English translation provided with Official action dated July 06, 2007).

With respect to claim 33, the anti-reflection material of Toshiaki is arranged such that it "can be" moved away from the container by a person. Note that the process of moving the material holds no patentable weight in an apparatus claim. Only structural language is determinative of the metes and bounds of a patent apparatus claim. See MPEP 2114.

Response to Arguments

10. Applicant's arguments filed September 14, 2009 have been fully considered but they are not persuasive. Applicant argues that Shimizu discloses a method for inspecting vials that are conveyed by a rotary table. Applicant states the light sources 34 and 35 of Shimizu are arranged under an acute angle and illuminate the upper section of the vial. A further light source 32 is located below the vial to enable the taking of an image of foreign substances by a camera when such substances, if present, can be picked up. Applicant argues the arrangement of light sources in Shimizu is not suitable for solving the light requirements of the present invention, in which a homogeneous light, which is free of reflections, is necessary in order to get reliable results of the status of the blood fluid. As noted above, the Patent Office states in the rejection that "a chamber having no reflections from exterior light sources (see chamber in Fig. 3)." Applicant submits that there is no disclosure anywhere in Shimizu of such a chamber. An important point to note is that the chamber 16 of the present invention is

free of reflections with respect to the inside lamps 46, 47, 48 and not from outside lamps. Applicant states that Shimizu "teaches away" from the present invention and gives no hint as to how to arrive at the claimed invention.

The Examiner respectfully disagrees. As discussed above, the illuminating device of Shimizu includes lamps 34, 35 arranged above the container. These lamps serve to illuminate the container and are located on two sides of the container in the stationary analysis position a lateral lamp 34, 35, see Fig. 6. The method of operating the Shimizu system is not germane to the argument, since the claims are to the apparatus. The lateral lamps 34, 35 of Shimizu are arranged such that the mid points of the two lateral lamps and the mid point of the container lie on a straight line (A) as seen from above like Applicant's figure 2. The illuminating device of Shimizu further comprises a middle lamp 32 being provided and arranged such that the mid points of the middle lamp 32 and of the container likewise lie on a vertical straight line (B) which is perpendicular to the straight line (A), as shown in Fig. 6 of Shimizu. Thus, the arranged of the light sources in Shimizu is identical to that claimed. When the structure recited in the reference is substantially identical to that of the claims, claimed properties or functions are presumed to be inherent. (MPEP 2112.02). Thus, the arrangement of light sources in Shimizu is suitable for providing a "homogeneous" light, which is free of reflections, necessary to get reliable results of the status of the blood fluid.

In addition, Shimizu teaches a chamber as shown in Fig. 3. it is important to note that the claims functionally recite the chamber having few optical reflections. There is no structure recited in the claim that accomplishes this. An apparatus claim must be structurally distinguishable from the prior art. While features of an apparatus may be

recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See MPEP 2114. It has been found that the absence of a disclosure in a prior art reference relating to function does not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference. Thus, the chamber having "few" reflections is inherent in the Shimizu reference. It is noted that Applicant's original specification states at page 7, lines 7-9, that in order for the chamber to provide few or no optical reflections the inner walls of the chamber are provided with matt black surfaces. This is a structural recitation that should be recited in the claim to structurally provide a chamber substantially free of reflections in order to get reliable results of the status of the blood fluid. Thus, for the delineated above, the claims remain rejected over the cited prior art.

Conclusion

11. No claims allowed.
12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 1797

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to P. Kathryn Wright whose telephone number is (571)272-2374. The examiner can normally be reached on Monday thru Thursday, 9 AM to 6 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. Kathryn Wright/
Primary Examiner, Art Unit 1797